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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/823,064

04/12/2004

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49986-0538

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7590

04/26/2010

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EXAMINER

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ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

04/26/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 2, 4-9, and 12-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (US 2003/0184782) in view of Shin (US 6,351,320).

Regarding Claim 1, Perkins teaches an apparatus (Page 1, paragraph 1) comprising: a non-volatile storage device (Page 2, paragraph 21); an application program (Page 1, paragraph 18); and a printer driver (Page 2, paragraph 21) configured to retrieve configuration data from a printing device (Page 2, paragraph 21), wherein the configuration data includes command data (Page 2, paragraph 21), cause the configuration data to be stored on the non-volatile storage device (Page 2, paragraph 21), and

use the command data included in the configuration data to translate a first command generated by the application program into a second command supported by the printing device (Page 2, paragraph 22).

Perkins does not teach wherein the configuration data includes program logic used by the printer driver.

However Shin does teach wherein the configuration data includes program logic used by the printer driver (Column 9, lines 25-33).

Perkins in view of Shin teaches use the program logic data to generate one or more graphical user interface objects that are displayed on a graphical user interface in association with the printing of an electronic document to the printing device, wherein the one or more graphical user interface objects correspond to installed options and option attributes on the printing device and reflect dependencies between the installed options and option attributes, and wherein the program logic data indicates the dependencies between the installed options and option attributes on the printing device (Perkins: Figure 5 and Page 3, paragraph 35, wherein the options are installed in order to be accessed for each printer. Perkins shows that the print options are dependent upon one other. This is a form of logic. However, Shin teaches the logic data in combination with the configuration data in Column 9, lines 25-33. The LUT is stored in relation to the logic data, which relates to the dependency condition. Therefore, the dependency condition is stored in the program logic data, by definition of logic data. The combination of both Perkins and Shin show how the logic data would relate to the dependencies in the printer driver.).

Perkins and Shin are combinable because they both deal with interfaces in regards to printers and printer drivers.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins with the teachings of Shin for the purpose of providing a memory saving printer driver for controlling output image aspects (Shin: Column 2, lines 63-65).

Regarding Claim 2, Perkins further teaches wherein the printer driver is configured to use the configuration data to facilitate printing of an electronic document (Page 2, paragraph 23).

Regarding Claim 7, Perkins further teaches wherein the configuration data indicates one or more options installed on the printing device (Figure 5 and Page 3, paragraph 35).

Regarding Claim 8, Perkins further teaches wherein the configuration data indicates one or more source trays available on the printing device (Figure 5 and Page 3, paragraph 5, wherein the paper sizes are stored on individual source trays).

Regarding Claim 9, Perkins does not teach wherein the configuration data indicates one or more media types available on the printing device.

However, Shin does teach wherein the configuration data indicates one or more media types available on the printing device (Column 9, lines 50-52).

Perkins and Shin are combinable because they both deal with interfaces in regards to printers and printer drivers.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins with the teachings of Shin for the purpose of providing a memory saving printer driver for controlling output image aspects (Shin: Column 2, lines 63-65).

4. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (US 2003/0184782) in view of Shin (US 6,351,320) further in view of Hanson (US 6,148,346).

Regarding Claim 4, Perkins in view of Shin does not teach wherein: configuration data includes bitmap data for the printing device, and the printer driver is configured to cause the bitmap data to be displayed on a graphical user interface in association with the printing of an electronic document.

However, Hanson does teach wherein: configuration data includes bitmap data for the printing device (Column 5, lines 13-22, where the bitmap data is taken as a form of graphical data), and the printer driver is configured to cause the bitmap data to be displayed on a graphical user interface in association with the printing of an electronic document (Column 5, lines 13-22).

Perkins and Hanson are combinable because they are both dealing with a user working with printer drivers.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins in view of Shin with the teachings of Hanson for the purpose of allowing for two way communications between a computer and a printer (Hanson: Column 2, lines 1-5).

Regarding Claim 5, Perkins in view of Shin does not teach wherein the printer driver is further configured to cause a graphical user interface object to be displayed on a graphical user interface, wherein the graphical user interface object includes a link with a URL associated with bitmap data included in the configuration data stored on the printing device.

However Hanson does teach wherein the printer driver is further configured to cause a graphical user interface object to be displayed on a graphical user interface, wherein the graphical user interface object includes a link with a URL associated with bitmap data included in the configuration data stored on the printing device (Column 5, lines 23-43, where the bitmap data is taken as a form of graphical data and the URL is treated as a link to another menu).

Perkins and Hanson are combinable because they are both dealing with a GUI in relation to printer drivers.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins in view of Shin with the

teachings of Hanson for the purpose of allowing for two way communications between a computer and a printer (Hanson: Column 2, lines 1-5).

Regarding Claim 6, Perkins in view of Shin does not teach wherein the printer driver is further configured to in response to detecting a user selection of the link, retrieve the bitmap data from the printing device and cause the bitmap data to be displayed on the graphical user interface.

Hanson teaches wherein the printer driver is further configured to in response to detecting a user selection of the link, retrieve the bitmap data from the printing device and cause the bitmap data to be displayed on the graphical user interface (Column 5, lines 23-43, where the bitmap data is taken as a form of graphical data and the URL is treated as a link to another menu).

Perkins and Hanson are combinable because they are both dealing with a GUI in relation to printer drivers.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins in view of Shin with the teachings of Hanson for the purpose of allowing for two way communications between a computer and a printer (Hanson: Column 2, lines 1-5).

5. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (US 2003/0184782) in view of Shin (US 6,351,320) further in view of Allen (US 2004/0143651).

Regarding Claim 12, Perkins in view of Shin does not teach wherein: the configuration data includes first version identification data that indicates a version of the configuration data retrieved by the printer driver, and the printer driver is further configured to:

retrieve second version identification data from the printing device, wherein the second version identification data indicates a version of the configuration data maintained on the printing device,

compare the first version identification data to the second version identification data, and if the comparison of the first version identification data to the second version identification data indicates that the version of configuration data maintained on the printing device is more recent than the version of configuration data retrieved by the printer driver, then the printer driver retrieving the more recent version of the configuration data from the printing device.

However, Taylor does teach wherein: the configuration data includes first version identification data that indicates a version of the configuration data retrieved by the printer driver (Page 4, paragraphs 35 and 36) and the printer driver is further configured to:

retrieve second version identification data from the printing device, wherein the second version identification data indicates a version of the configuration data maintained on the printing device (Page 4, paragraphs 35 and 36),

compare the first version identification data to the second version identification data (Page 4, paragraphs 35 and 36), and if the comparison of the first version identification data to the second version identification data indicates that the version of configuration data maintained on the printing device is more recent than the version of configuration data retrieved by the printer driver, then the printer driver retrieving the more recent version of the configuration data from the printing device (Page 4, paragraphs 35 and 36).

Perkins and Taylor are combinable because they both are dealing with working with printer drivers.

Therefore it is obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins in view of Shin with the teachings of Taylor for the purpose of making sure that the client computer possesses the current printer properties (Taylor: Page 1, paragraph 9).

Regarding Claim 13, Perkins in view of Shin does not teach wherein the printer driver is configured to retrieve the configuration data from the printing device in response to an indication that the printer driver is not fully compatible with the printing device.

However, Allen does teach wherein the printer driver is configured to retrieve the configuration data from the printing device in response to an indication that the printer driver is not fully compatible with the printing device (Page 4, paragraphs 35 and 36).

Perkins and Taylor are combinable because they both are dealing with working with printer drivers.

Therefore it is obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins in view of Shin with the teachings of Taylor for the purpose of making sure that the client computer possesses the current printer properties (Taylor: Page 1, paragraph 9).

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (US 2003/0184782) in view of Shin (US 6,351,320) further in view of Vidyanand (US 6,967,728).

Regarding Claim 14, Perkins in view of Shin does not teach wherein the printer driver is further configured to: retrieve second configuration data from a second printing device, and cause the second configuration data to be stored on the non-volatile storage device.

However Vidyanand does teach wherein the printer driver is further configured to: retrieve second configuration data from a second printing device (Column 3, lines 28-48) cause the second configuration data to be stored on the non-volatile storage device (Column 5, lines 23-28).

Perkins and Vidyanand are combinable because they both deal with installing printer drivers.

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Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins in view of Shin with the teachings of Vidyanand for the purpose of providing transferable printer drive preferences (Vidyanand : Column 3, lines 18-24).

7. Claims 15-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (US 2003/0184782) in view of Hanson (US 6,148,346) further in view of Jin (US 2003/058285).

Regarding Claim 15, Perkins teaches an apparatus (Page 1, paragraph 1) comprising:

a non-volatile storage device (Page 2, paragraph 21).

Perkins does not teach a printer driver configured to retrieve bitmap data from a printing device, wherein the bitmap data reflects the printing device, and cause the bitmap data to be stored on the non-volatile storage device; and an application program to cause the bitmap data to be displayed on a graphical user interface to provide a visual depiction of the printing device.

Hanson does teach a printer driver configured to retrieve bitmap data from a printing device (Column 5, lines 13-22, where the bitmap data is taken as a form of graphical data), and

cause the bitmap data to be stored on the non-volatile storage device (Column 2, lines 22-28); and

an application program to cause the bitmap data to be displayed on a graphical user interface (Column 5, lines 13-22).

Perkins and Hanson are combinable because they are both dealing with a GUI in relation to printer drivers.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins with the teachings of Hanson for the purpose of allowing for two way communications between a computer and a printer (Hanson: Column 2, lines 1-5).

Jin teaches wherein the bitmap data reflects the printing device (Figure 2 and Page 1, paragraph 8), and

an application program to cause the bitmap data to be displayed on a graphical user interface to provide a visual depiction of the printing device (Figure 2 and Page 1, paragraph 8)

Perkins in view of Hanson and Jin are combinable because they are both dealing with a GUI in relation to printer drivers.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins in view of Hanson with the teachings of Jinn for the purpose of allowing a user easier control over the printing device (Jin: Page 1, paragraph 8).

Regarding Claim 16, Perkins further teaches wherein the graphical user interface is configured to facilitate printing of an electronic document (Page 2, paragraph 23 and Page 3, paragraph 35).

Regarding Claim 17, Perkins does not teach wherein the printer driver is configured to retrieve the bitmap data from the printing device in response to a user selecting a link on the graphical user interface.

Hanson does teach wherein the printer driver is configured to retrieve the bitmap data from the printing device in response to a user selecting a link on the graphical user interface (Column 5, lines 23-43, where the bitmap data is taken as a form of graphical data and the URL is treated as a link to another menu).

Perkins and Hanson are combinable because they are both dealing with a GUI in relation to printer drivers.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins with the teachings of Hanson for the purpose of allowing for two way communications between a computer and a printer (Hanson: Column 2, lines 1-5).

Regarding Claim 20, Perkins does not teach wherein: the bitmap data reflects the printing device and one or more options or media types currently supported by the printing device, and

the application program causing the bitmap data to be displayed on the graphical user interface provides a visual depiction of the printing device and the one or more options or media types currently supported by the printing device.

Hanson does teach wherein: the bitmap data reflects the printing device and one or more options or media types currently supported by the printing device (Column 5, line 61 – Column 6, line 9).

Perkins and Hanson are combinable because they are both dealing with a GUI in relation to printer drivers.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins with the teachings of Hanson for the purpose of allowing for two way communications between a computer and a printer (Hanson: Column 2, lines 1-5).

Jin does teach the application program causing the bitmap data to be displayed on the graphical user interface provides a visual depiction of the printing device and the one or more options or media types currently supported by the printing device (Figure 2 and Page 1, paragraph 8, wherein the tray can be replaced by the paper type of Hanson).

Perkins in view of Hanson and Jin are combinable because they are both dealing with a GUI in relation to printer drivers.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins in view of Hanson with the

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teachings of Jinn for the purpose of allowing a user easier control over the printing device (Jin: Page 1, paragraph 8).

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (US 2003/0184782) in view of Hanson (US 6,148,346) further in view of Jin (US 2003/0058285) further in view of Wilson (GB 2,347,766).

Regarding Claim 18, Perkins in view of Hanson further in view of Jin does not teach wherein the printer driver is configured to retrieve the bitmap data from the printing device in response to an indication that the printer driver is not fully compatible with the printing device.

Wilson does teach wherein the printer driver is configured to retrieve the bitmap data from the printing device in response to an indication that the printer driver is not fully compatible with the printing device (Page 5, lines 28-34, wherein the bitmap data is a part of the driver).

Perkins in view of Hanson further in view of Jin and Wilson are combinable because they both are dealing with working with printer drivers.

Therefore it is obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Perkins in view of Hanson further in view of Jin with the teachings of Wilson to allow the user not to have to deal with problems with the print driver when printing (Wilson: Page 6, lines 15-19).

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9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (US 2003/0184782) in view of Hanson (US 6,148,346) further in view of Jin (US 2003/0058285) further in view of Vidyanand (US 6,967,728).

Regarding Claim 19, Perkins in view of Hanson further in view of Jin does not teach wherein the printer driver is further configured to:

retrieve second bitmap data from a second printing device, and
cause the second bitmap data to be stored on the non-volatile storage device.

Vidyanand does teach wherein the printer driver is further configured to:

retrieve second bitmap data from a second printing device (Column 3, lines 28-48), and

cause the second bitmap data to be stored on the non-volatile storage device (Column 5, lines 23-28).

Perkins in view of Hanson further in view of Jin and Vidyanand are combinable because they both deal with installing printer drivers.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings Perkins in view of Hanson further in view of Jin with the teachings of Vidyanand for the purpose of providing transferable printer drive preferences (Vidyanand : Column 3, lines 18-24).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas C. Pachol whose telephone number is 571-270-3433. The examiner can normally be reached on M-Thr, 8:00 a.m.- 4:00 p.m. (EST), Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/N. C. P./
Examiner, Art Unit 2625

04/24/10

/Twyler L. Haskins/
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